

Fig. 2

	Αl	Zn	Mn	Si	Cu	Ni	Fe	М д
Alloy A	9.1	0.78	0.24	_	0.001	0.0009	0.003	Remainder
Alloy B	6.9	0.60	0.23	0.01	0.002	0.0005	0.002	Remainder
Alloy C	7.2	0.2	0.22	_	0.001	0.0008	0.003	Remainder

Units:mass.%

Fig. 3A

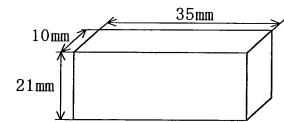
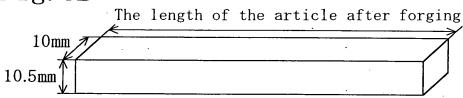
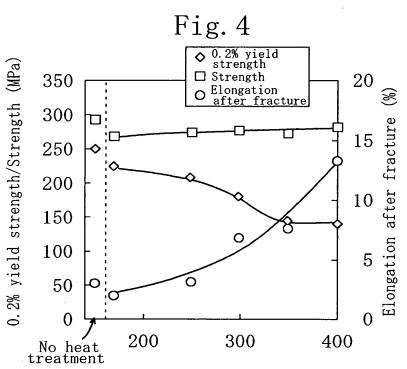
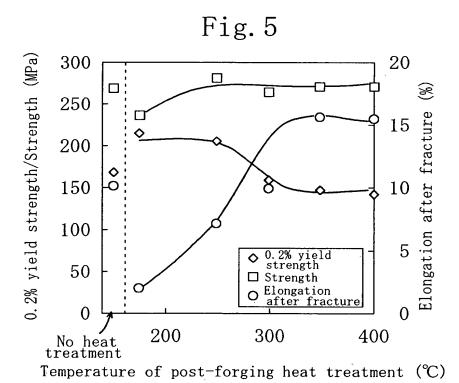


Fig. 3B





Temperature of post-forging heat treatment ( $^{\circ}$ C)



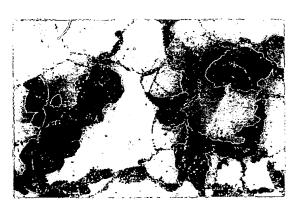


Fig. 6A
T6 treatment

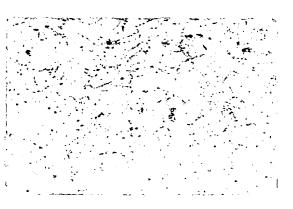


Fig. 6C processing temperature =350°C

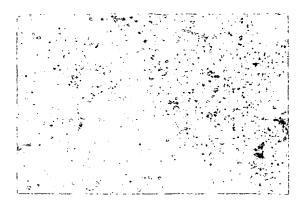


Fig. 6B processing temperature =300℃

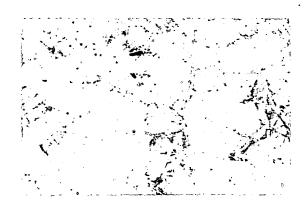


Fig. 6D processing temperature =400°C

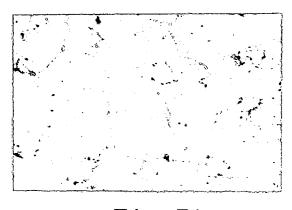


Fig. 7A

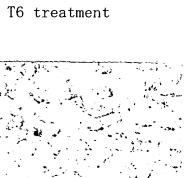


Fig. 7C processing temperature =350°C

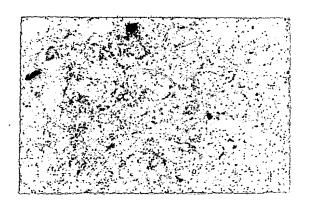


Fig. 7B processing temperature =300°C

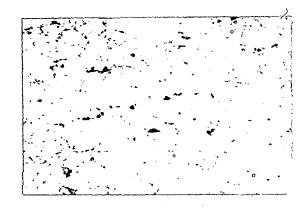
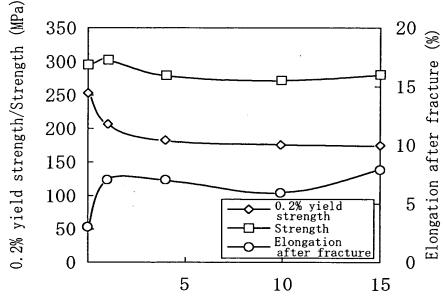


Fig. 7D processing temperature =400°C

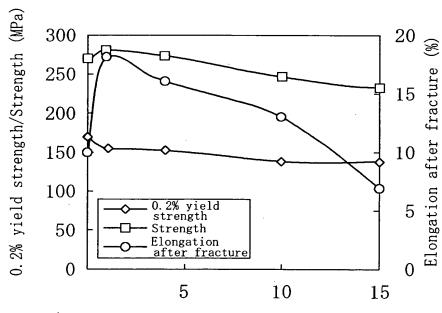
Fig. 8

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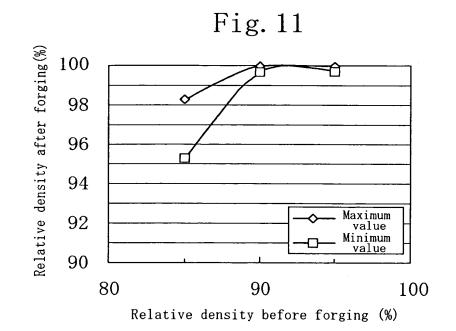
Time of post-forging heat treatment (h)

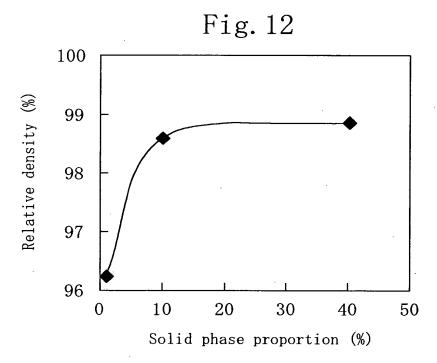
Fig. 9

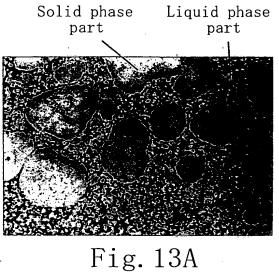


Time of post-forging heat treatment (h)

Fig. 10A Fig. 10B







F1g. I3A
Alloy A before heat treatment
Grain boundary

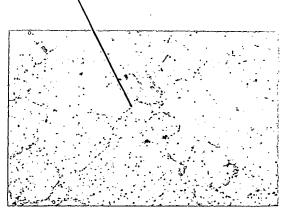
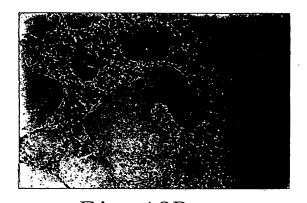
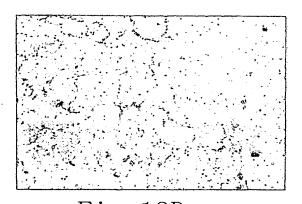


Fig. 13C
Alloy A after heat treatment



 $\begin{array}{c} Fig.~13B \\ \text{Alloy B before heat treatment} \end{array}$ 



 $\begin{array}{c} \text{Fig. 13D} \\ \text{Alloy B after heat treatment} \end{array}$